

Date: Tuesday, 7/1/2008 10:47:06 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BEARING ASSEMBLY	
Job Number : 40159		
Estimate Number : 11136		
P.O. Number :	Part Number : D3183045	
This Issue : 7/1/2008 S.O. No. :	Drawing Number : D3183 REV C1	
Prsht Rev. : NC	Project Number : N/A	
First Issue : 1/1 Type : MACHINED PARTS	Drawing Revision : C1	
Previous Run : 39637	Material :	
Written By :	Due Date : 7/14/2008	Qty: <del>40</del> Um: Each
Checked & Approved By : <u>08.07.01</u>		
Comment : Est A 04.02.18 New issue KJ/DS		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	MDELRLNR1000	Delrin Round Bar 1"
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Comment: Qty.: 0.0350 f(s)/Unit Total: 1.3986 f(s)  
 Delrin Round Bar 1"  
 Material: Ø1.00 Delrin Rod  
 (M-DELRLNR-1.000)  
 Identify as D3183-9  
 Batch: M108757

160

MNF 08/07/29

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL  
 Turn D3183-9 Cap as per Folio FA388  
 Deburr

160

MNF 08/07/30

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

160

MNF 08/07/30

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

160

MNF 08/07/36

5.0	D31835	Bearing
-----	--------	---------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
1 D3183-5	Bearing	

B40181 (18X)

B40519 (40X)

08/08/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
					1/30			

NOTE: Date & initial all entries

Date: Tuesday, 7/1/2008 10:47:06 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARING ASSEMBLY

Job Number: 40159

Part Number: D3183045

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Press D3183-5 Bearing into D3183-9 Cap as per Dwg D3183

*CB 08/08/07* (58)

*870*

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*8 08/08/07* (58)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

*CS 8/8/7* (58)

9.0

QC21

FINAL INSPECTION/W/O RELEASE



(58)

Comment: FINAL INSPECTION/W/O RELEASE

*1208/07/08*

Job Completion



*MF 08-08-07*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08/08/07	6	stk balance of 12ps D3183-9 B40159 Qty 102	EB	08/08/07	102	U 08/08/07	S 08/08/07

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

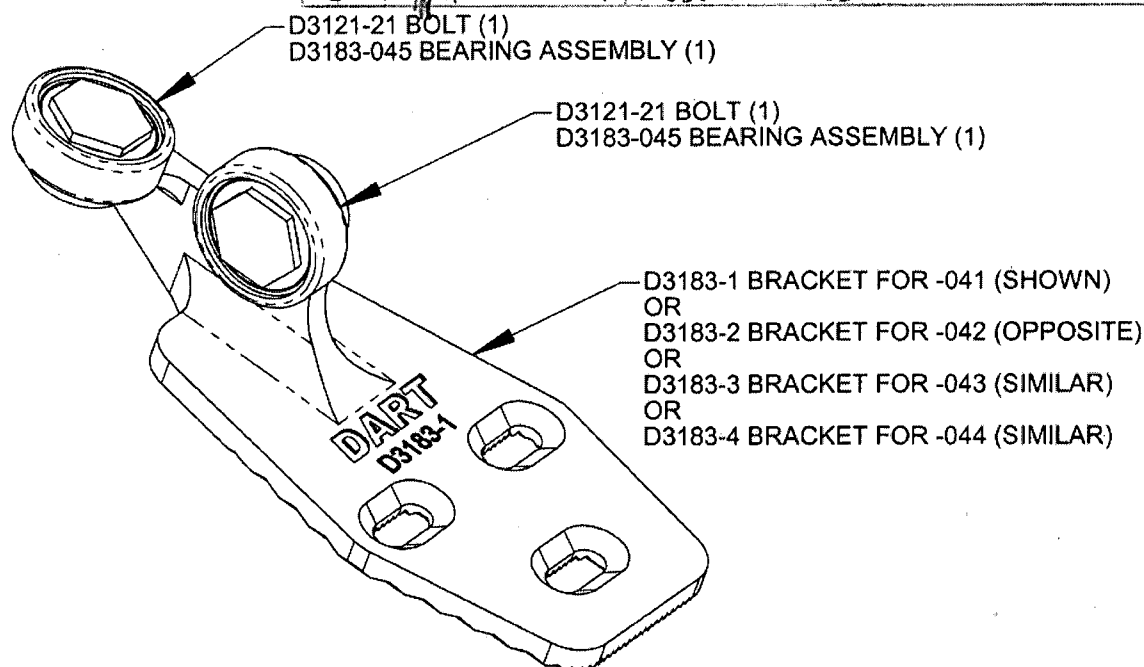
NOTE: Date &amp; initial all entries



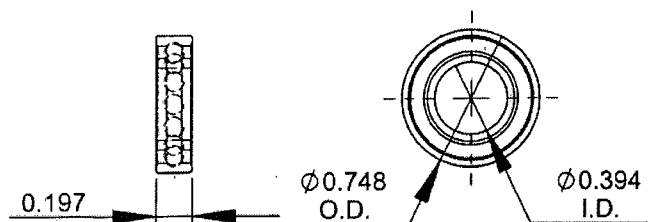


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CHECKED #	APPROVED #	DRAWING NO. <b>D3183</b>	REV. C SHEET 1 OF 4
DATE <b>04.02.17</b>	TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1	
A.	03.01.24	NEW ISSUE	
B.	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C.	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED  
04.03.01



**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**



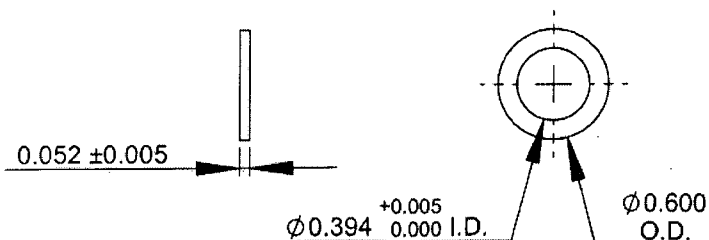
**D3183-5 BEARING:**  
**SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, RETURN TO CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES

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WORK ORDER  
NO. 40159

**D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES



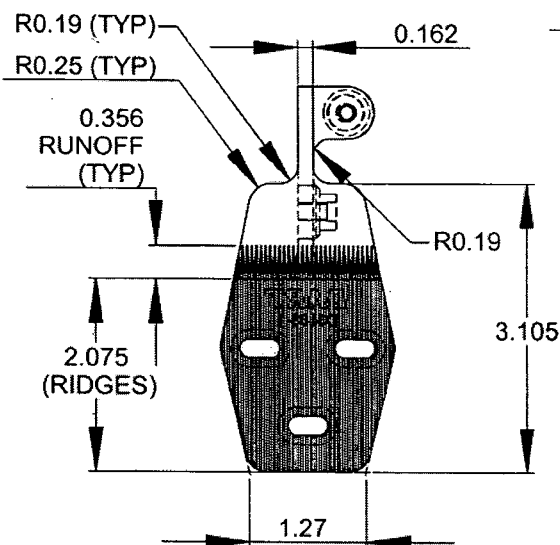
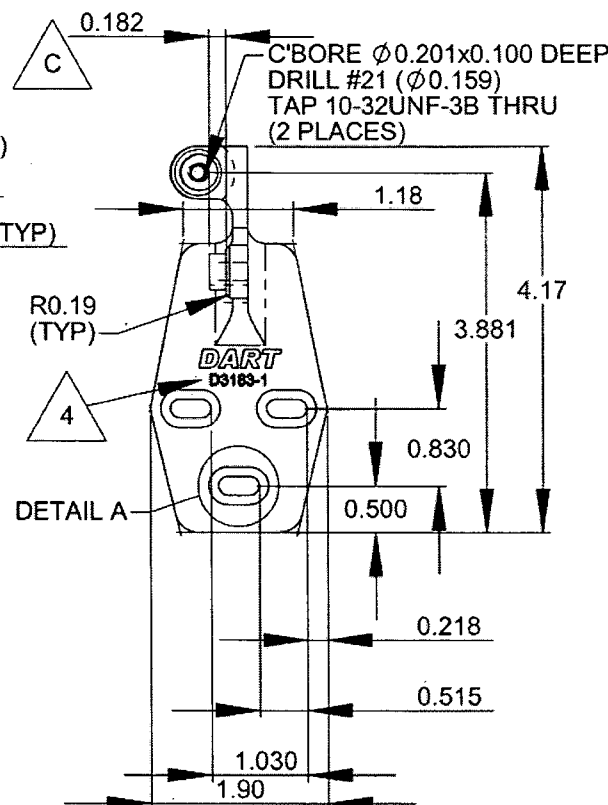
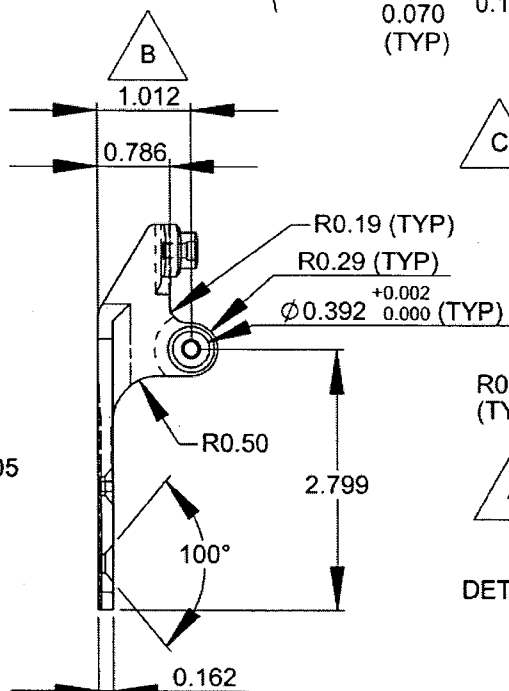
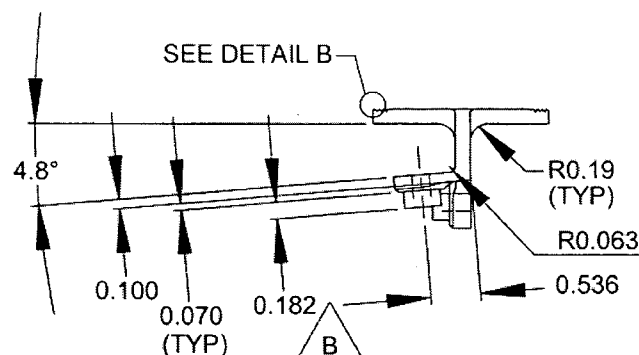
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DATE 04.02.17	TITLE <b>BRACKET ASSEMBLY</b>	SHEET 2 OF 4	SCALE 1:2

RELEASED  
04-03-01



**D3183-1 BRACKET SHOWN  
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

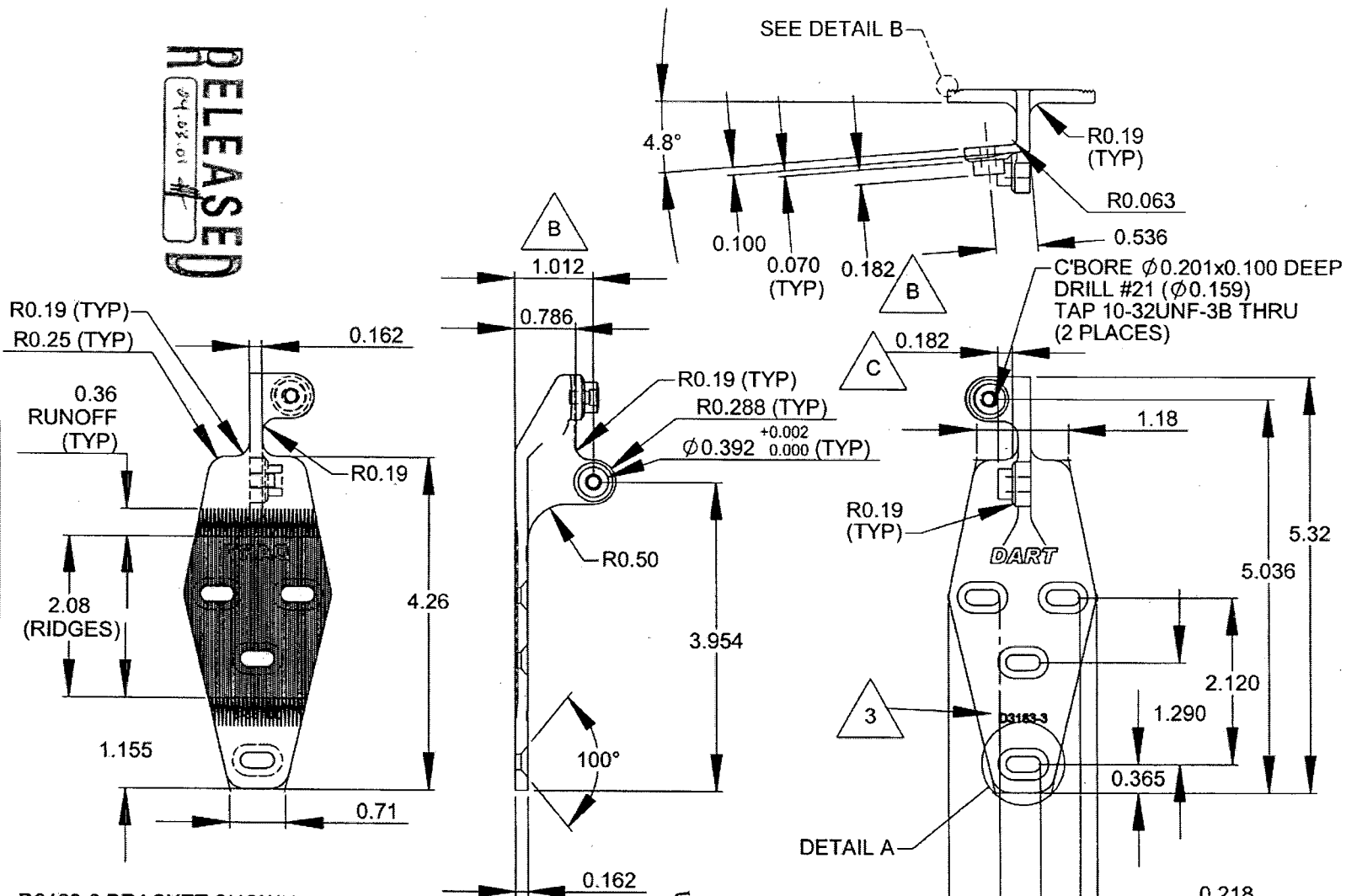
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		D3183	SHEET 3 OF 4
DATE	TITLE		SCALE
04.02.17	BRACKET ASSEMBLY		1:2



**D3183-3 BRACKET SHOWN**  
**(REPLACES BELL P/N 412-030-304-105)**  
**D3183-4 BRACKET OPPOSITE**  
**(REPLACES BELL P/N 412-030-304-106)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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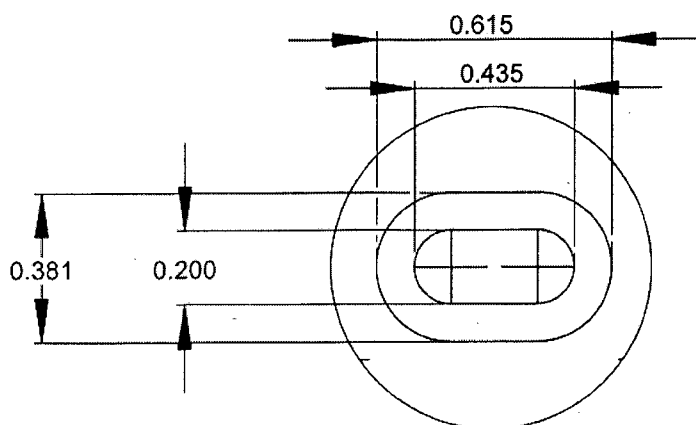
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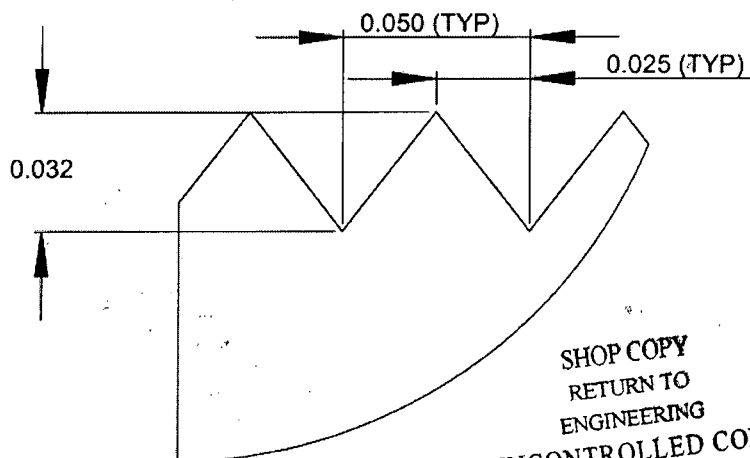


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DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1



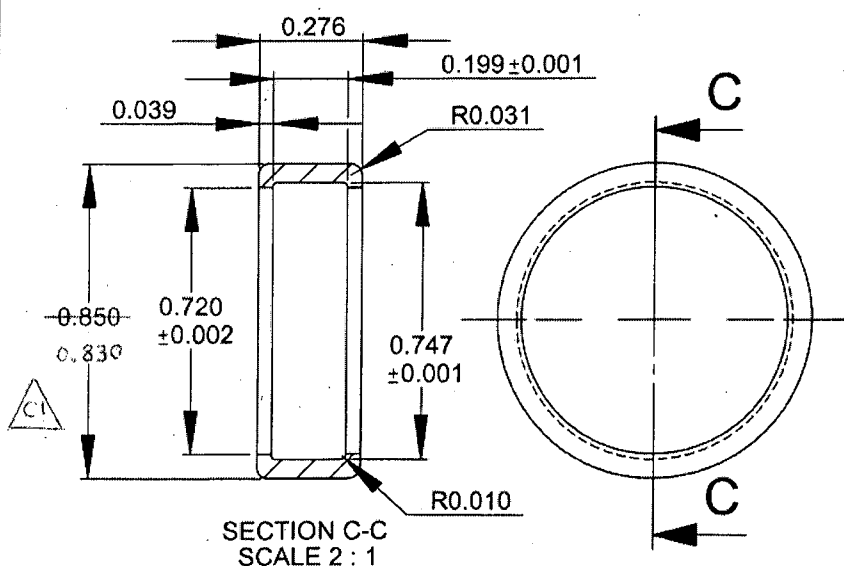
DETAIL A (2 : 1)

**RELEASED**  
04.03.01 *[Signature]*



DETAIL B (20 : 1)

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WORK ORDER  
NO. **40159**



**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00  
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018  
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-045 BEARING ASSEMBLY**

- 1) ASSEMBLE D3183-5 BEARING AND  
D3183-9 CAP

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